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CLAIMS

[Utility model registration claim]

[Claim 1] The body 2 which formed in the end the opening 1 which serves as the holder for stamp actuation and touches a stamp side at the time of stamp, The printing object 4 which has the stamp face 3 in which printing was formed, and has been arranged by said stamp actuation in opening 1 so that stamp of a stamp face 3 may be possible, Along with the both sides of the printing object 4, it is prepared possible [frequent appearance] from opening 1. From a stamp face 3 at the time of un-stamping a seal A projection, It has the side plate 5 which consists of a pair prepared in the body 2 possible [sliding to the method of the inside of a body] when pushed at the time of stamp. Stamp equipment characterized by having formed in the body the pivot 6 for supporting the printing pressure which joins the printing object 4 at the time of stamp possible [sliding], and preparing the spring force regulatory mechanism which adjusts the amount of telescopic motion of the retaining spring 7 which gives printing pressure to a stamp face 3 at the time of stamp in said pivot 6.

[Claim 2] A stamp face 3 is stamp equipment given in the 1st term of a claim which a projection and its lower limit 4a are projected [given] rather than edge 1a of the opening 1 of a body 2, a stamp face 3 consists of [given] lower limit 4a of the printing object 4 in which it was formed, at the time of stamp so that only the stroke S to opening 1 may resist a retaining spring 7 and it may be pushed in, and carries out size change of this stroke S by the spring force regulatory mechanism.

[Claim 3] A side plate 5 is stamp equipment of the 1st publication of a claim which has arc-shaped tip marginal 5a which the center projected, and has the structure which prepared 5d of marks in the center of the cross direction of the tip marginal 5a.

[Claim 4] Stamp equipment of the 1st publication of a claim constituted so that 5d of excision sections which left crosswise center-section 5c to the side plate 5 of the direction located in the stamp face 3 bottom, and excised the right and left by necessary width of face in the vertical direction to it might be formed and printing actuation of the internal printing object 4 might be seen through 5d of excision sections.

[Translation done.]

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DETAILED DESCRIPTION

[Detailed explanation of a design]

[0001]

[Industrial Application]

This design is related with the suitable stamp equipment for the so-called osmosis type rubber stamp. [0002]

[Description of the Prior Art]

The rubber stamp of the ink osmosis type which has the stamp face which consists of an alphabetic character, a figure, a notation, etc. is well-known, and since clear print of a seal is obtained, it is popular. However, since printing pressure, i.e., the stamp force, cannot perform control of a difference pressure at every stamp, the problem from which always clear print of a seal is not necessarily obtained has it. touching a stamp side to a tooth-space part, if it pushes too much strongly when a tooth space is especially between printing -- as -- it is -- ** -- saying -- a fault -- being generated.

[0003]

Moreover, in the conventional ink osmosis type rubber stamp, printing pressure is fixed from the beginning. That is, although it is set up so that it may become the optimal pressure when manufacturing an osmosis type rubber stamp therefore, it was required that the total thickness should have been managed very strictly in an alphabetic character height (alphabetic character depth) list, and much time amount and cost have been just **(ed) by it. [0004]

in addition, "a blot" according [especially if print of a seal changes by the method of stamp, i.e., the size of printing pressure, several times as much ink as a proper amount will be supplied to a stamp side by the printing pressure beyond the need, and] to the excess of ink -- being generated -- print of a seal -- no -- it is made clear. For this reason, conventionally, effect arose for computer reading precision, such as an OCR font, and there was a fault in which dependability is reduced.

[0005]

[Problem(s) to be Solved by the Device]

It is in having been made by view by carrying out this design at the aforementioned point, a fixed stamp result being obtained and always making print of a seal clear, however, as for the technical problem, who may do stamp actuation, and 100% of dependability being acquired by computer reading precision etc. [0006]

[Means for Solving the Problem]

The body 2 which formed in the end the opening 1 which this design serves as the holder for stamp actuation in order to solve said technical problem, and touches a stamp side at the time of stamp, The printing object 4 which has the stamp face 3 in which printing was formed, and has been arranged by said stamp actuation in opening 1 so that stamp of a stamp face 3 may be possible, Along with the both sides of the printing object 4, it is prepared possible [frequent appearance] from opening 1. From a stamp face 3 at the time of un-stamping a seal A projection, To the stamp equipment equipped with the side plate 5 which consists of a pair prepared in the body 2 possible [sliding] to the method of the inside of a body when pushed at the time of stamp The pivot 6 for supporting the printing pressure which joins the printing object 4 at the time of stamp is formed possible [sliding] in a body, and a means to attach in said pivot 6 the spring force regulatory mechanism which adjusts the amount of telescopic motion of the retaining spring 7 which gives printing pressure to a stamp face 3 at the time of stamp is provided.

[0007]

[Example]

With reference to a drawing, it explains below.

[8000]

a body 2 -- hollow -- it was formed in the flat case mold and serves as the holder held single hand for stamp actuation. The lower limit of a body 2 serves as the long and slender opening 1, and the edge 1a touches the stamp side P at the time of stamp (<u>drawing 5</u> (c)). 1b is the middle notch of edge 1a, and, for this reason, edge 1a is located in the both ends of the long and slender opening 1. [0009]

The stamp face 3 which consists of combination, such as printing 3a, is formed in the inferior surface of tongue of the printing object 4, and this stamp face 3 is arranged in said opening 1, and it forms print of a seal by stamp actuation. 3b shows the tooth space between printing 3a (<u>drawing 1</u>). Although tooth-space 3b is cratered from printing 3a, of course, lower limit 4a of the printing object 4 and this field are sufficient. [0010]

The ink reservoir 8 which can sink ink into the flesh side of the member which formed the stamp face 3 is the osmosis type rubber stamp prepared in one, and the printing object 4 has the structure where ink is supplied to a stamp face through the rubber material which has an open cell.

[0011]

This printing object 4 is assembled by the lower limit of the supporter 10 which has the supplement hole 9 for supplementing the ink reservoir 8 with ink in one, and is incorporated in a body possible [vertical movement] with a supporter 10.
[0012]

That is, a supporter 10 has the central main pivot 6, and guide pivot 6' on either side and 6'. The double nuts 14 and 15 which it is fitted in the hole 12 of the supporter 11 formed in the body, and can move up and down, and the male screw section 13 is formed in the main pivot upper limit, resist the main retaining spring 7 attached in the lower part of a supporter 11, and enable vertical accommodation of a supporter 10 are screwed in the upside male screw section 13, and the main pivot 6 constitutes the spring force regulatory mechanism. Guide pivot 6' and 6' are fitted in into the guide hole of the guide sections 16 and 16 formed in the right and left within a body, and prevent the deflection of a stamp face 3.

Thus, the supporter 10 included in the body 1 is energized by the retaining spring 7 prepared in the main pivot 6 in the direction where a stamp face 3 projects from open end 1a. Same auxiliary retaining spring 7' and 7' are prepared also in guide pivot 6' and 6' parts, and he is trying to be obtained in equal printing pressure over the whole region of the long and slender stamp face 3.

[0014]

Although a stamp face 3 is maintained at the condition of having projected from open end 1a by said retaining spring 7, 7', and 7' and it is pushed in at the time of stamp, this stroke S can be adjusted by actuation of the nut of the regulatory mechanism of the spring force of backing up by the retaining spring 7, 7', and 7'.

[0015]

A side plate 5 is used as a scale for being prepared more possible [frequent appearance] than opening 1, for example, doubling a stamp face 3 with a stamp part along with the both sides of the printing object 4. The side plate 5 of instantiation is formed in the shape of [which the Uichi Hidari pair unified by the up bond parts 17 and 17] an abbreviation portal. These bond parts 17 and 17 are stopped on the top face of a supporter 10, and at the time of un-stamping a seal, it is energized by said auxiliary retaining spring 7' and 7' in the protrusion direction so that it may project from a stamp face 3.

[0016]

As shown in <u>drawing 1</u>, a straight line-like is sufficient as this side plate 5, but as shown in <u>drawing 2</u> or <u>drawing 6</u> (a), arc-shaped tip marginal 5a which the center projected can be prepared, and 5d of marks can be prepared in that center of the cross direction.

Furthermore it leaves crosswise center-section 5c of a side plate 5, and 5d of excision sections can be formed by excising by necessary width of face in the vertical direction, and it can also constitute so that printing actuation of the internal printing object 4 may be seen through 5d of excision sections (<u>drawing 6</u> (b)). These marks 5b and 5c are prepared for one side or the both sides of a stamp face 3 top or the bottom, and can also perform up-and-down decision.

[0018]

Among each drawing, the lower member of a supporter 10 and 19 are the stop sections of the lower limit, and 18 stop the printing object 4. Moreover, 20 is the cap for opening and closing the up side face of a body

2, and is detached and attached for a supplement of ink etc. [0019]

Thus, if the part of a stamp face 3 is put in the constituted stamp equipment to the stamp side P at the time of un-stamping a seal A side plate 5 touches the stamp side P first (<u>drawing 5</u> (a)), since side plates 5 and 5 will resist a retaining spring 7, 7', and 7' and will retreat if it pushes further, a stamp face 3 touches a stamp side (<u>drawing 5</u> (b)), and after edge 1a of opening 1 has hit the stamp side P, it stops (<u>drawing 5</u> (c)). [0020]

Although only the stroke S predetermined in a stamp face 3 retreats by stamp actuation, by adjusting the regulatory mechanism of the spring force of backing up a supporter 10, by actuation of nuts 14 and 15, the force of the sum total of the spring force of each retaining spring 7, 7', and 7' can be adjusted, and it can be made fixed printing pressure.

[0021]

[Effect of the Device]

Therefore, however who may do stamp actuation according to this design, only a stamp face pattern will be printed, since it is not printed and printing is moreover stamped with fixed printing pressure, garbages of print of a seal, such as blank 3b, are remarkably sharp, and since it is so quality that it is equal to the clearness of printing, remarkable effectiveness -- 100% of dependability is acquired by computer reading precision -- is done so.

[0022]

Moreover, since always proper printing pressure can be obtained by accommodation even if the part of the printing object 4 has thickness, modification of alphabetic character depth, etc. by the spring force regulatory mechanism, since accommodation of printing pressure is possible, the minimum is sufficient as the production control on manufacture, and there is the description by which the process itself is simplified. Since a stamp location is discerned on the structure of a side plate 5 in the further conventional osmosis type rubber stamp, according to the side plate in this design, a posture unnatural to a user can be more exactly stamped with an easy posture, since the localization is easy, although it came by force.

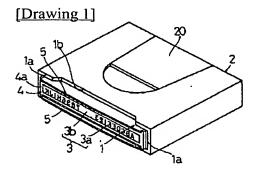
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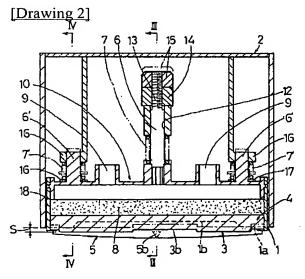
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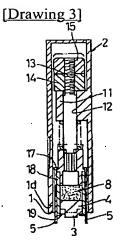
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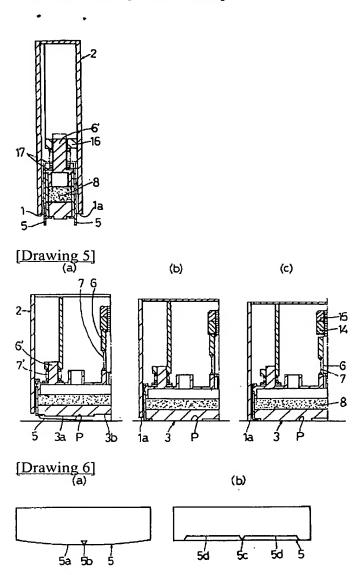
DRAWINGS







[Drawing 4]



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(71)出願人 591185283

株式会社菊池製作所

東京都北区東十条5丁目6番6号

(72)考案者 菊池 尚和

東京都北区東十条5丁目6番6号

(74)代理人 弁理士 井沢 洵

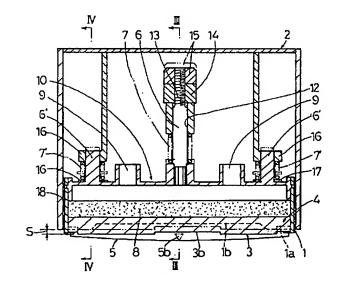
平成 4年(1992) 6月12日

(54)【考案の名称】 印判装置

(57)【要約】

【目的】 押捺操作の強弱に拘らず、一定の印圧が得られ、常に鮮明な印影が得られるようにする。

【構成】 印字が形成された印面3を有する印字体4と、印面3が開口1から出没可能なように前記印字体4を内部に収める中空な本体2と、前記印字体4の両側に印字体4と相対移動可能に本体2に設けられた一対の側板5、5と、印字体4を摺動可能に本体2に取り付けるための支軸6及び印面3に所要の印圧を与えるための支持ばね7とを具備し、前記支軸6に、支持ばね7の伸縮量を調節するばね力調節機構を設けた印判装置。



【実用新案登録請求の範囲】

【請求項1】 押捺操作のためのホルダを兼ね、押捺時に押捺面に接する開口1を一端に設けた本体2と、印字が形成された印面3を有し、前記押捺操作によって印面3の押捺が可能なように開口1内に配置された印字体4と、開口1より出没可能に印字体4の両側に沿って設けられ、非押捺時は印面3より突出し、押捺時に押されると本体内方へ摺動可能に本体2に設けられた一対からなる側板5とを備え、押捺時に印字体4に加わる印圧を支えるための支軸6を本体内に摺動可能に設け、押捺時に印面3に印圧を与える支持ばね7の伸縮量を調節するばね力調節機構を前記支軸6に設けたことを特徴とする印判装置。

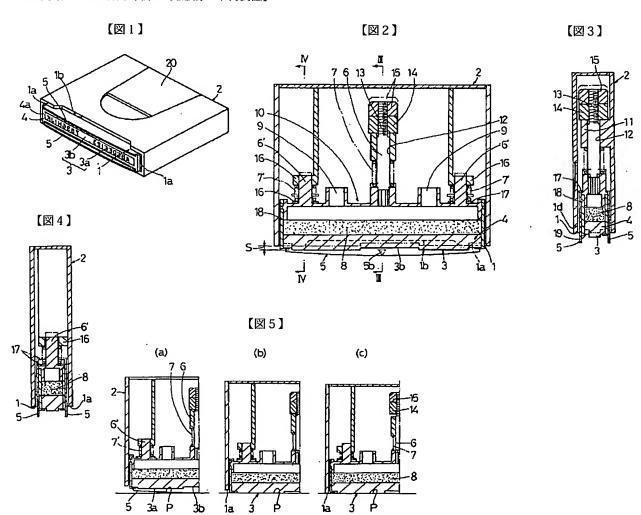
【請求項2】 印面3は、それを形成した印字体4の下端4aより突出し、かつその下端4aは本体2の開口1の端部1aよりも突出しており、押捺時、印面3は開口1までのストロークSだけ支持ばね7に抗して押込まれるように構成され、このストロークSをばね力調節機構で大小変化させる請求項第1項記載の印判装置。

*【請求項3】 側板5は中央が突出した弧状の先端縁5 aを有し、その先端縁5aの幅方向の中央に目印5dを 設けた構造を有する請求項第1記載の印判装置。

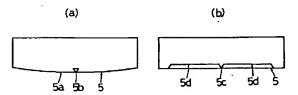
【請求項4】印面3の上側に位置する方の側板5に、幅方向中央部5cを残してその左右を上下方向へ所要の幅で切除した切除部5dを形成し、切除部5dを通して内部の印字体4の印字動作が見られるように構成された請求項第1記載の印判装置。

【図面の簡単な説明】

- 10 【図1】本案印判装置の実施例を示す斜視図。
 - 【図2】同上の長手方向の縦断面図。
 - 【図3】図2の111-111線断面図。
 - 【図4】図2のIV-IV線断面図。
 - 【図5】(a)押捺直後の状態を示す断面説明図。
 - (b) 押捺開始時の断面説明図。
 - (c) 押捺終了時の断面説明図。
 - 【図6】(a)側板5の形状の1例を示す正面図。
 - (b) 側板5の形状の他の例を示す正面図。







【考案の詳細な説明】

[0001]

【産業上の利用分野】

本考案は所謂浸透式ゴム印に好適な印判装置に関するものである。

[0002]

【従来の技術】

文字、数字、記号等からなる印面を有するインク浸透式のゴム印は公知であり、鮮明な印影が得られるため好評である。しかし印圧すなわち押捺力は押捺の都度異なり圧力のコントロールができないため、常に鮮明な印影が得られるとはかぎらない問題がある。特に印字間にスペースがある場合、強く押しすぎるとスペース部分まで押捺面に接することがままあるという欠点を生じる。

[0003]

また、従来のインク浸透式ゴム印では印字圧が最初から一定である。つまり浸透式ゴム印を製造するときに最適圧力となるように設定されるが、そのため文字高さ(文字深度)並びに総厚みを極めて厳格に管理することが要求され、それに多くの時間と経費がついやされてきた。

[0004]

なお、印影が押捺の仕方つまり印圧の大小によって変化すると特に必要以上の 印圧により適正量の数倍のインクが押捺面に供給され、インク過多による「にじ み」を生じて印影を否鮮明にする。このため従来は、OCR文字などのコンピュ ータ読み取り精度に影響が生じ、信頼性を低下させる欠点があった。

[0005]

【考案が解決しようとする課題】

本考案は前記の点に着目にしてなされたもので、その課題は誰がどのように押 捺操作をしても、一定の押捺結果が得られ、印影は常に鮮明にしてコンピュータ 読み取り精度などに100%の信頼性が得られるようにすることにある。

[0006]

【課題を解決するための手段】

前記課題を解決するため本考案は、押捺操作のためのホルダを兼ね、押捺時に

押捺面に接する開口1を一端に設けた本体2と、印字が形成された印面3を有し、前記押捺操作によって印面3の押捺が可能なように開口1内に配置された印字体4と、開口1より出没可能に印字体4の両側に沿って設けられ、非押捺時は印面3より突出し、押捺時に押されると本体内方へ摺動可能に本体2に設けられた一対からなる側板5とを備えた印判装置に、押捺時に印字体4に加わる印圧を支えるための支軸6を本体内に摺動可能に設け、押捺時に印面3に印圧を与える支持ばね7の伸縮量を調節するばね力調節機構を前記支軸6に取付けるという手段を講じたものである。

[0007]

【実施例】

以下図面を参照して説明する。

[0008]

本体2は中空偏平なケース型に形成され、押捺操作のため片手で保持するホルダを兼ねている。本体2の下端は細長い開口1となっており、その端部1aは押捺時に押捺面Pに接する(図5(c))。1bは端部1aの中間切欠部であり、このため端部1aは細長い開口1の両端に位置する。

[0009]

印字3 a 等の組み合わせからなる印面3は印字体4の下面に形成されており、 この印面3が前記開口1内に配置されて押捺操作により印影を形成する。3 b は 印字3 a 間のスペースを示す(図1)。スペース3 b は勿論印字3 a よりへこん でいるが、印字体4の下端4 a と同面でも良い。

[0010]

印字体 4 は、印面 3 を設けた部材の裏にインクを含浸可能なインク溜め 8 が一体的に設けられた浸透式ゴム印であって、連続気泡を有するゴム素材を通じてインクが印面まで供給される構造を有する。

[0011]

この印字体 4 は、インク溜め 8 ヘインクを補充するための補充孔 9 を有する保持体 1 0 の下端に一体的に組み立てられており、保持体 1 0 とともに上下動可能に本体内に組み込まれる。

[0012]

即ち保持体10は中央の主支軸6と、左右のガイド支軸6′、6′とを有する。主支軸6は、本体内に形成された支持部11の孔12に嵌挿されて上下動可能であり、主支軸上端にはおねじ部13が形成され、支持部11の下部に取り付けられた主支持ばね7に抗して保持体10を上下調節可能にするダブルナット14、15が上部のおねじ部13に螺合され、ばね力調節機構を構成している。ガイド支軸6′、6′は本体内左右に形成されたガイド部16、16のガイド孔内に嵌挿され、印面3の振れを防止する。

[0013]

このように本体 1 に組み込まれた保持体 1 0 は主支軸 6 に設けられた支持ばね 7 によって、印面 3 が開口端部 1 a から突出する方向へ付勢される。同様の補助 支持ばね 7' 、 7' がガイド支軸 6' 、 6' 部分にも設けられ、細長い印面 3 の 全域にわたって均等な印圧が得られるようにされている。

[0014]

印面3は前記支持ばね7、7′、7′により開口端部1 a より突出した状態に保たれ、かつ押捺時に押し込まれるが、このストローク S は支持ばね7、7′、7′によりバックアップするばね力の調節機構のナットの操作によって調節することができる。

[0015]

側板5は印字体4の両側に沿って、開口1より出没可能に設けられ、例えば、押捺箇所に印面3を合わせるためのスケールとして使用される。例示の側板5は左右一対が上部結合部17、17で一体化した略門形状に形成されている。この結合部17、17は保持体10の上面に係止し、かつ非押捺時は印面3より突出するように前記補助支持ばね7′、7′により突出方向へ付勢されている。

[0016]

この側板5は図1に示すように直線状でも良いが、図2または図6(a)に示すように、中央が突出した弧状の先端縁5aを設け、かつその幅方向中央に目印5dを設けることができる。

[0017]

さらに側板5の幅方向中央部5cを残して、上下方向へ所要の幅で切除することにより切除部5dを形成し、切除部5dを通して内部の印字体4の印字動作が見られるように構成することもできる(図6(b))。この目印5b、5cは印面3の上側または下側の一方または双方に設け、上下の判断もできるようにすることができる。

[0018]

各図中、18は保持体10の下部部材、19はその下端の係止部で、印字体4 を係止する。また20は本体2の上部側面を開閉するためのキャップで、インク の補充などのために着脱される。

[0019]

このように構成された印判装置では、非押捺時押捺面 Pに印面 3 の部分を当てるようにすると、まず側板 5 が押捺面 Pに接し(図 5 (a))、さらに押すと側板 5、5 が支持ばね 7、7′、7′に抗して後退するので印面 3 が押捺面に接し(図 5 (b))、開口 1 の端部 1 a が押捺面 Pに当った状態で停止する(図 5 (c))。

[0020]

押捺操作で印面 3 は所定のストローク S だけ後退するが、保持体 1 0 をバックアップするばね力の調節機構をナット 1 4 、 1 5 の操作で調節することにより、各支持ばね 7 、 7 、 7 のばね力の合計の力を調節し、一定の印圧にすることができる。

[0021]

【考案の効果】

従って本考案によれば誰がどのように押捺操作をしても印面パターンのみが印字され、ブランク3bなど不要部分は印字されることがなく、しかも印字は一定の印圧で押捺されるから印影は著しくシャープで、印刷の鮮明さに匹敵する程高品質であるからコンピュータ読み取り精度にも100%の信頼性が得られる等顕著な効果を奏する。

[0022]

また、ばね力調節機構により印圧の調節が可能であるから、印字体4の部分に

厚みや文字深度の変更等があっても、常に適正な印圧を調節によって得ることができるから、製造上の工程管理が最小限で良く、工程自体も簡素化される特徴がある。さらに従来の浸透式ゴム印では側板5の構造上、押捺位置を見定めるため、使用者に不自然な姿勢を強いて来たが、本考案における側板によれば位置確認が容易なため、楽な姿勢で、より的確に押捺することができる。